

$$\frac{2}{1-3x} \leq 1 + \frac{2}{x-2}$$

$$\frac{2}{1-3x} \leq \frac{x-2+2}{x-2} \quad ; \quad \frac{2}{1-3x} \leq \frac{x}{x-2}$$

$$\frac{2}{1-3x} - \frac{x}{x-2} \leq 0$$

$$\text{mcm: } (1-3x)(x-2)$$

$$\frac{2(x-2) - x(1-3x)}{(1-3x)(x-2)} \leq 0 \quad ; \quad \frac{2x-4-x+3x^2}{(1-3x)(x-2)} \leq 0$$

$$\frac{3x^2 + x - 4}{(1-3x)(x-2)} \leq 0 \quad ; \quad \frac{3(x^2 + \frac{1}{3}x - \frac{4}{3})}{(1-3x)(x-2)} \leq 0$$

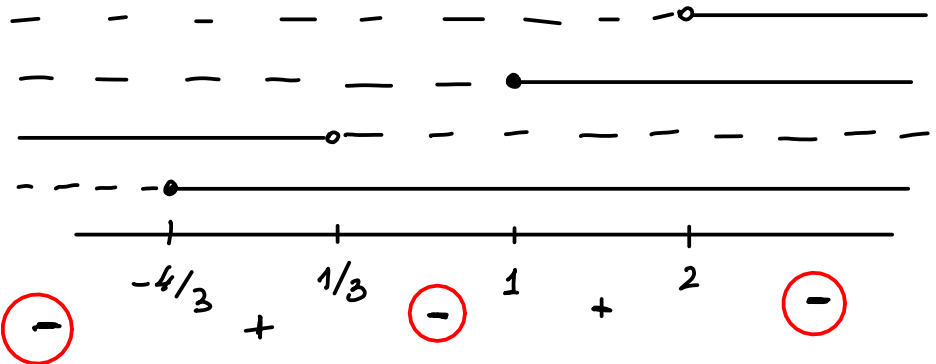
$$\frac{3(x-1)(x+\frac{4}{3})}{(1-3x)(x-2)} \leq 0$$

$$\bullet \quad x-1 \geq 0 \rightarrow x \geq 1$$

$$\bullet \quad x + \frac{4}{3} \geq 0 \rightarrow x \geq -\frac{4}{3}$$

$$\bullet \quad 1-3x > 0 \rightarrow x < \frac{1}{3}$$

$$\bullet \quad x-2 > 0 \rightarrow x > 2$$



$$x \leq -\frac{4}{3} \quad \vee \quad \frac{1}{3} < x \leq 1 \quad \vee \quad x > 2$$